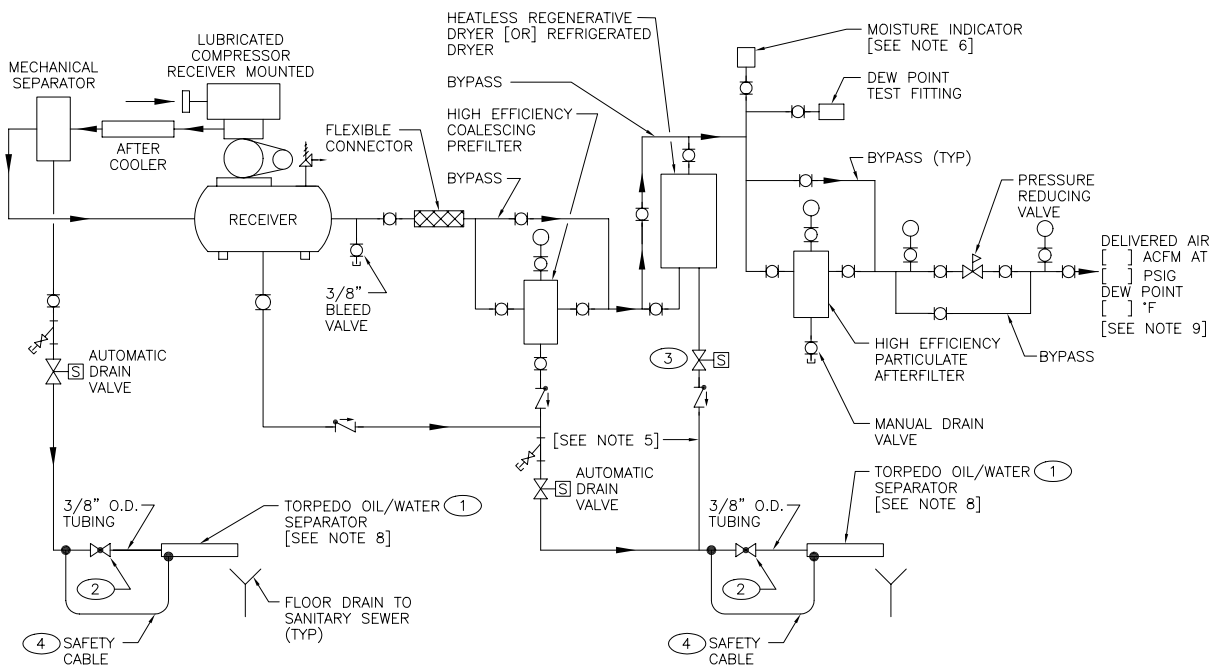

COMPRESSED AIR COMPONENT DIAGRAM

SCALE: NONE

KEYED NOTES:

1. INSTALL ABSORBENT PAD (FURNISHED WITH SEPARATOR) UNDER TORPEDO. LAY DIAGONALLY.
2. THROTTLE GLOBE VALVE TO REGULATE AIR FLOW TO PREVENT TORPEDO SEPARATOR FROM BLOWING OFF.
3. AUTOMATIC DRAIN VALVE FURNISHED WITH REFRIGERATED DRYER.
4. SECURE CABLE WITH WIRE TIE WRAPS (FURNISHED WITH TORPEDO) TO SUITABLE ANCHOR POINT.

DRAWING DEVELOPED FOR ML-3/ ML-4 PROJECTS. FOR ML-1/ ML-2, ADDITIONAL REQUIREMENTS AND QA REVIEWS ARE REQUIRED. (REMOVE THIS NOTE WHEN IN-SERTED INTO A DRAWING PACK-AGE).

NOTES FOR DESIGNER: (DO NOT INCLUDE ON CONSTRUCTION DRAWINGS)

1. WHEN EDITING DETAIL TO SUIT PROJECT, ADD JOB SPECIFIC REQUIREMENTS AND DELETE ONLY THOSE PORTIONS THAT DO NOT APPLY. TO SEEK A VARIANCE FROM APPLICABLE REQUIREMENTS, CONTACT THE ESM MECHANICAL POC.
2. REFER TO THE FOLLOWING LANL STANDARDS FOR ADDITIONAL REQUIREMENTS:
   A. ENGINEERING MANUAL, MECHANICAL CHAPTER.
   B. SPEC 01325, WATER DISCHARGE REQUIREMENTS.
   C. SPEC 15211, COMPRESSED AIR SYSTEMS.
3. ADD WATER PIPING AND ISOLATION VALVES IF COMPONENTS (COMPRESSOR, AFTERCOOLER, ETC) ARE WATER COOLED. USE NONPOTABLE WATER THAT IS CHEMICALLY TREATED.
4. ALL AUTOMATIC DRAIN VALVES TO BE ON A SINGLE DEDICATED CIRCUIT WITH A SINGLE RECEPTACLE (WITHIN 48") FOR EACH VALVE.
5. PROVIDE DRAIN LINE WHEN SPECIFYING A REFRIGERATED DRYER. HEATLESS REGENERATIVE DRYER DOES NOT REQUIRE A DRAIN LINE.
6. PROVIDE MOISTURE INDICATOR WHEN NOT PROVIDED WITH REGENERATIVE DRYER. DO NOT INSTALL ON SYSTEM WITH REFRIGERATED DRYER.
7. DETAIL SHOWS MINIMUM REQUIRED FILTERS FOR TYPE OF COMPRESSOR AND DRYER USED. COMPRESSED AIR SYSTEM MAY REQUIRE ADDITIONAL FILTERS AND POINT OF OF USE FILTERS. FOR EXAMPLE, AN OIL VAPOR ABSORBING FILTER, INSTALLED BETWEEN THE DRYER AND AFTERFILTER MAY BE REQUIRED WHENEVER OIL VAPORS (HYDROGCARBONS ARE DETRIMENTAL TO EQUIPMENT OR PROCESS).
8. WHEN A SANITARY SEWER DRAIN IS NOT AVAILABLE, SPECIFY A COMMERCIALLY AVAILABLE OIL/WATER SEPARATOR, SUCH AS, VAN AIR MODEL ES SERIES. CONSULT WITH MANUFACTURES REPRESENTATIVE FOR APPLICATION AND SIZING INFORMATION).
9. REFER TO ISO 8573-1 AND THE ENGINEERING STANDARDS MANUAL SECTION D2090 COMPRESSED AIR (FUTURE), FOR STANDARDS ON AIR QUALITY CLASSES FOR VARIOUS LEVELS OF PARTICULATE, MOISTURE, AND LUBRICANT CONTAMINANTS.

NO	DATE	CLASS REV	DESCRIPTION	DWN	DSGN	CHKD	SUB	APP
3	8-13-03	U	EDITORIAL CHANGES AND DWG NO. WAS ST6020.	RP	JM	RR	GG	TO
2	9-6-02	U	REVISED NOTES AND ADDED "ML" NOTES.	RP	JR	GG	GG	TO
1	2-7-01	U	REVISED FLOW DIAGRAM, NOTES, AND ADDED SHEET 3 AND 4.	RP	JR	RR	TO	TO

FACILITY & WASTE OPERATIONS
DESIGN ENGINEERING CONSTRUCTION SERVICES

ENGINEERING STANDARDS MANUAL

COMPRESSED AIR COMPONENT DIAGRAM
LUBRICATED COMPRESSOR, RECEIVER MOUNTED

DRAWN R.PEARSON
DESIGN J.RATLIFF
CHECKED R.ROMERO
DATE 6-28-99

BLDG X TA-X

SUBMITTED
DISCIPLINE POC: GURINDER GREWAL

APPROVED FOR RELEASE
STANDARDS MANAGER: TOBIN ORUCH

Los Alamos NATIONAL LABORATORY
PO Box 1663
Los Alamos, New Mexico 87545

SHEET 1
1 OF 4

CLASSIFICATION U
REVIEWER LARRY BAYS
DATE

PROJECT ID CHAPTER 6
DRAWING NO ST-D2090-1
REV 3

G:\LANL Engineering Standards\Eng. Manual [LEM]\2. Approved\ST-D2090-1M13.dwg, 09/18/03 @ 14:26 093598